NOTICE OF ALLOWANCE AND FEE(S) DUE

909   7590   01/26/2010

PILLSBURY WINTHROP SHAW PITTMAN, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER
ENGLAND, DAVID E

ART UNIT	PAPER NUMBER
2443	

DATE MAILED: 01/26/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,231	05/23/2000	Lundy Lewis	019287-0317297	3634

TITLE OF INVENTION: METHOD AND APPARATUS FOR COMPONENT TO SERVICE MAPPING IN SERVICE LEVEL MANAGEMENT (SLM)

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$0	$0	$1510	04/26/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: <u>Mail</u>   **Mail Stop ISSUE FEE**
                                                Commissioner for Patents
                                                P.O. Box 1450
                                                Alexandria, Virginia 22313-1450
                or <u>Fax</u>   **(571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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PILLSBURY WINTHROP SHAW PITTMAN, LLP
P.O. BOX 10500
MCLEAN, VA 22102

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,231	05/23/2000	Lundy Lewis	019287-0317297	3634

TITLE OF INVENTION: METHOD AND APPARATUS FOR COMPONENT TO SERVICE MAPPING IN SERVICE LEVEL MANAGEMENT (SLM)

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	$1510	$0	$0	$1510	04/26/2010

EXAMINER	ART UNIT	CLASS-SUBCLASS
ENGLAND, DAVID E	2443	709-224000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

❏ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

❏ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 _____

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE   (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) :   ❏ Individual   ❏ Corporation or other private group entity   ❏ Government

4a. The following fee(s) are submitted:

❏ Issue Fee

❏ Publication Fee (No small entity discount permitted)

❏ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

❏ A check is enclosed.

❏ Payment by credit card. Form PTO-2038 is attached.

❏ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

❏ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.   ❏ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____   Date _____

Typed or printed name _____   Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,231	05/23/2000	Lundy Lewis	019287-0317297	3634

			EXAMINER
909 7590 01/26/2010			ENGLAND, DAVID E

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ART UNIT	PAPER NUMBER
2443	

DATE MAILED: 01/26/2010

Determination of Patent Term Extension under 35 U.S.C. 154 (b)

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

	Application No.	Applicant(s)
Notice of Allowability	09/577,231	LEWIS, LUNDY
	Examiner	Art Unit
	DAVID E. ENGLAND	2443

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *12/16/2009*.

2. ☒ The allowed claim(s) is/are *13-25,27-39,49-61*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

      Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

/David E. England/
Primary Examiner, Art Unit 2443

EXAMINER'S AMENDMENT

1.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with

Syed Jafar Ali Reg. No. 58780 on 11/10/2009.

The application has been amended as follows:

Claim 13. (Currently Amended) A method, executed on a computing device, for component to

monitoring a service, the service mapping in service level management on at least of a network,

the comprising:

providing a service over a network having a plurality of network components that support

the service, wherein performance of the service depends upon performances of the plurality of

network components that support the service, and wherein the service has a state that represents

the performance of the service;

monitoring a plurality of component parameters for the plurality of network components

that support the service across a plurality of domains of the network;

mapping the plurality of component parameters monitored across the plurality of domains

of the network to a service parameter that represents the state of the service, wherein the state of

the service indicates whether the service conforms to an agreed upon service level identified in a

service level agreement;

monitoring the service parameter that represents the state of the service to detect a change in the state of the service; and

determining a cause of the change in the state of the service in response to detecting the change in the state of the service, wherein determining the cause of the change in the state of the service includes:

executing one or more data mining algorithms to discover respective influences on the service parameter for a first subset of the monitored component parameters in a first domain of the plurality of domains of the network;

executing the one or more data mining algorithms to discover respective influences on the service parameter for a second subset of the monitored component parameters in a second domain of the plurality of domains of the network;

identifying one of the first subset of the monitored component parameters or the second subset of the monitored component parameters as including the cause of the change in the state of the service; and

identifying at least one of the component parameters in the identified subset of the monitored component parameters as the cause of the change in the state of the service.

Claim 27. (Currently Amended) A <u>computer hardware</u> system for component to service mapping in service level management comprising:

a network having a plurality of network components that support a service provided over the network, wherein performance of the service depends upon performances of the plurality of

network components that support the service, and wherein the service has a state that represents

the performance of the service;

a plurality of monitoring agents that monitor a plurality of component parameters for the

plurality of component parameters that support service across a plurality of domains of the

network; and

a network management system configured to:

map the plurality of component parameters monitored across the plurality of domains of

the network a service parameter that represents the state of the service, wherein the state of the

service indicates whether the service conforms to an agreed upon service level identified in a

service level agreement;

monitor the service parameter that represents the state of the service to detect a change in

the state of the service;

execute one or more data mining algorithms to discover respective influences on the

service parameter for a first subset of the monitored component parameters in a first domain of

the plurality of domains of the network in response to detecting the change in the state of the

service;

execute the one or more data mining algorithms to discover respective influences on the

service parameter for a second subset of the monitored component parameters in a second

domain of the plurality of domains of the network in response to detecting the change in the state

of the service;

identify one of the first subset of the monitored component parameters or the second

subset of the monitored component parameters as including the cause of the change in the state

of the service; and

identify at least one of the component parameters in the identified subset of the monitored

component parameters as the cause of the change in the state of the service.

Claim 49. (Currently Amended) A computer-readable medium, having stored thereon, ~~containing~~

computer-executable instructions for providing service analysis in service level management

wherein executing the computer-executable instructions on a computer causes the computer to:

provide a service over a network having a plurality of network components that support

the service, wherein performance of the service depends upon performances of the plurality of

network components that support the service, and wherein the service has a state that represents

the performance of the service;

monitor a plurality of component parameters for the plurality of network components that

support the service across a plurality of domains of the network;

map the plurality of component parameters monitored across the plurality of domains of the

network to a service parameter that represents the state of the service, wherein the state of the

service indicates whether the service conforms to an agreed upon service level identified in a

service level agreement;

monitor the service parameter that represents the state of the service to detect a change in

the state of the service;

execute one or more data mining algorithms to discover respective influences on the service parameter for a first subset of the monitored component parameters in a first domain of the network in response to detecting the change in the state of the service;

execute the one or more data mining algorithms to discover respective influences on the state of the service parameters for a second subset of the monitored component parameters in a second domain of the plurality of domains of the network in response to detecting the change in the state of the service;

identify one of the first subset of the monitored component parameters or the second subset of the monitored component parameters as including the cause of the change in the state of the service; and

identify at least one of the component parameters in the identified subset of the monitored component parameters as the cause of the change in the state of the service.

2.   The following is an examiner's statement of reasons for allowance: (Bhoj et al. 6304892, Yemini et al. 6249755, Taghadoss 6052722 and Glitho et al. 6233449), does not teach nor suggest in detail, a method, system or computer readable medium for component to monitoring a service, the service mapping in service level management on at least of a network, the comprising: providing a service over a network having a plurality of network components that support the service, wherein performance of the service depends upon performances of the plurality of network components that support the service, and wherein the service has a state that represents the performance of the service;

monitoring a plurality of component parameters for the plurality of network components that support the service across a plurality of domains of the network;

mapping the plurality of component parameters monitored across the plurality of domains of the network to a service parameter that represents the state of the service, wherein the state of the service indicates whether the service conforms to an agreed upon service level identified in a service level agreement;

monitoring the service parameter that represents the state of the service to detect a change in the state of the service; and

determining a cause of the change in the state of the service in response to detecting the change in the state of the service, wherein determining the cause of the change in the state of the service includes:

executing one or more data mining algorithms to discover respective influences on the service parameter for a first subset of the monitored component parameters in a first domain of the plurality of domains of the network;

executing the one or more data mining algorithms to discover respective influences on the service parameter for a second subset of the monitored component parameters in a second domain of the plurality of domains of the network;

identifying one of the first subset of the monitored component parameters or the second subset of the monitored component parameters as including the cause of the change in the state of the service; and identifying at least one of the component parameters in the identified subset of the monitored component parameters as the cause of the change in the state of the service," as argued by the Applicant (see Remarks dated 04/24/2009; Specification as of 09/26/2000, pages

28, 40-44, 47 – 57, 60 - 81; and Drawings dated 05/23/2000, Figures 10 – 20 and 27 – 34 of

Applicant's enabling portions of the specification and drawings).

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DAVID E. ENGLAND whose telephone number is (571)272-

3912. The examiner can normally be reached on Mon-Thur, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David E. England
Primary Examiner
Art Unit 2443

/David E. England/
Primary Examiner, Art Unit 2443